

REMARKS

Applicants believe the claims remaining in this application as amended are in condition for allowance.

Interview Request:

Applicants request a telephone interview with the examiner and request that the examiner contact the undersigned attorney for Applicants when the examiner has had the opportunity to review this response and is prepared to discuss the application.

Claim Amendments:

Claim 39 is amended to particularly indicate, as described in the specification, the real time and content relationship between of the plurality of video signals and to further clarify the process of selecting video signals for display.

Priority Claim:

Applicants would like to correct a typographical error in the filing dated 19 April 2002 entitled *Fourth Amendment and Response to Office Action* in the last paragraph of the section headed "Priority Claims on page 6. Applicants are entitled, through the priority claims to application no. 07/797,298, to an effective filing date of 25 November 1991, not 2001. It appears that this error was overlooked by the Office and the intent of Applicants was recognized as only pre-1991 references were cited by the Office in the present action.

Claim Rejections – 35 U.S.C. § 103:

The Office action rejected pending claims 39-43 and 228-235 pursuant to 35 U.S.C. § 103(a) in view of U.S. Patent no. 5,068,733 to Bennett and U.S. Patent No. 5,585,858 to Gersdorff et al..

This application concerns the transmission and reception of related digital video signals, particularly video signals representing multiple camera angles of a single event, e.g., a sporting event. The video signals are compressed, combined, and transmitted as a single data stream to a receiver, in one embodiment, in the same NTSC channel bandwidth. The invention allows a viewer to select the video signal with the camera angle he desires. The particular video signal selected may be displayed on the television without a channel change. In the event that a transmission of more video signals than can be compressed into a single channel bandwidth is desired, the related digital video signals may be distributed over two or more channel

bandwidths, at least one of which is a single data stream of multiple video signals. The user may be notified of optional related video signals for selection through the presentation of information about the related video signals in conjunction with the display of each video signal.

Bennett discloses transmitting multiple related analog video signals collected from the video camera sources (11, 13, 15, 17) at a remote studio (1) by microwave transmission (75, 77, 79, 81, 83) to a combiner (85). Once combined, the video signals are transmitted via radio frequency broadcast (87) to a cable transmission system head end (133) where the video signals are demodulated from the radio frequency broadcast and split apart into separate microwave transmissions for input to the cable distribution system (133). There is no further teaching in Bennett regarding how the video signals are ultimately formatted and distributed by the cable head end. (See col. 2, ll.17-40.) Bennett only describes the collection of video signals and a methodology for providing those signals to a cable head end. With regard to reception and presentation to a user, Bennett merely states that each camera is “associated with a different channel on a conventional receiver. ... [To select a particular camera,] the viewer simply chooses the appropriate channel on the receiver.” (See col. 1, l. 67 – col. 2, l. 2.) However, there is no teaching of how to transmit multiple related video signals to a receiver for access and viewing by a user. In this respect, Bennett is not analogous as a reference.

The Gersdorff et al. reference describes a digital transmission system utilizing compression techniques to encode and transmit only a single video signal, a single related audio signal, and a single data signal. Contrary to the assertion in the Office action, Gersdorff et al. does not describe the compression and combined transmission of multiple video signals.

Applicants remind the Office that it is improper to ‘pick and choose among the individual elements of assorted prior art references to recreate the claimed invention,’ but rather, we look for ‘some teaching or suggestion in the references to support their use in the particular claimed combination.’” *Symbol Technologies, Inc. v. Opticon, Inc.*, 935 F.2d 1569 (Fed. Cir. 1991). The teachings of Bennett solely concern the production of video signals in an analog environment. There is no suggestion in Bennett that the invention was in any way related to digital video signal compression or transmission techniques. Therefore, Applicants contend there is no motivation to combine the teachings of Bennett with the Gersdorff et al. reference, or any digital compression references for that matter. Likewise, there is no discussion on Gersdorff et al. regarding, for example, the processing, transmission, or reception of multiple video signals,

much less multiple related video signals. Therefore, Applicants contend there is no suggestion in Gersdorff et al. to consider the teachings of Bennett in combination.

“It is error to reconstruct the patentee’s [applicant’s] claimed invention from the prior art by using the patentee’s [applicant’s] claim as a blueprint. When prior art references require selective combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight obtained from the invention itself. It is critical to understand the particular results achieved by the new combination.” *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132 (Fed. Cir. 1985). Applicants’ claimed invention is to a method that includes transmitting to a receiver a plurality of related digital (not analog) video signals (and attendant audio and data signals as well) compressed together in a combined digital program stream. In this manner, the related video signals may be transmitted in the same channel bandwidth. This method of transmission to a user and the relationship between the video signals is not taught or suggested by Bennett in view of Gersdorff et al. and their combination can only be attributed to hindsight based upon the pending claims. Further, the benefits of such a transmission and reception method are not appreciated by the prior art.

According to the present invention, each of the related video signals in the digital stream once received may be displayed without switching between NTSC channel bandwidths. As described in the disclosure of the priority document (application no. 07/797,298 at p. 13), the multiple choice controller may be programmed to provide the illusion of switching channels, whereby the user does not know that there are multiple signals per channel. However, no switching between channel bandwidths need occur in order to display the video signal. When the digital signals are in the same channel bandwidth, there is a decreased lag or latency in the switch between the related video signals than is found when switching between NTSC channels that results in a comparatively lesser quality viewing experience. This novel use of increased bandwidth gained by the digital transmission and reception methods is clearly a substantial improvement over the prior art and is not contemplated therein.

Additionally, neither claim 232 or 233 is anticipated or rendered obvious by any of the disclosure of Bennett or Gersdorff et al.; therefore, the rejection of these claims is inappropriate. The Office action contends that Bennett discloses either displaying an interrogatory or information regarding signal selections to the viewer. Bennett states that multiple video options may be provided to a user. (See col. 1, ll. 32-39) This is nothing more than stating that the

different camera feeds are transmitted. Bennett clearly does not disclose or suggest that any information regarding the options is provided and there is no teaching of any methodology for providing information about choosing between the various related channels. These contentions in the Office action are facially inaccurate and the subject matter of claims 232 and 233 was not contemplated at all by the disclosure of Bennett. Retraction of this rejection is requested. Gersdorff et al. further does not disclose the transmission of multiple video signals in the same bandwidth as claimed in claim 229. The referenced passage in Gersdorff et al. (col. 2, ll. 65-68) cited in the Office action address the transmission of transform coefficients produced by the digital compression of a single video image signal.

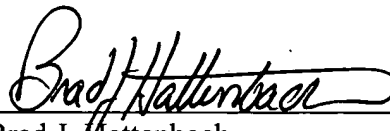
Conclusion:

It is believed the Office action rejections are inapplicable to the claims presently under consideration in this application for the reasons discussed above. Applicants request that the amendments and new claims as presented herein be entered. Applicants further request the rejections be removed and that notification of allowance of the claims be provided without delay.

Extension of Time:

This reply is filed within the fourth month following the Office action. A petition for extension of time to file this amendment and response pursuant to 37 C.F. R. §1.136(a) and the fee as set forth in 37 C.F.R. §1.17(a) are filed herewith.

Respectfully submitted this 16th day of January 2003.



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APPENDIX A

Claim Amendments with Markings to Show Changes Made

(Additions are shown by underlining and deletions are indicated in ~~striketrough~~.)

In the Claims:

39. (Thrice Amended) A method for providing live interactive digital programming comprising:
- obtaining a plurality of video signals from a plurality of camera angles, wherein at least one of the plurality of camera angles provide a differentiable view of a live event and wherein the plurality of video signals relate in real time and content;
 - digitally compressing the plurality of video signals;
 - digitally multiplexing the plurality of digitally compressed video signals into a combined digital program stream;
 - transmitting the combined digital program stream;
 - receiving the combined digital program stream at a receiver;
 - digitally demultiplexing the plurality of video signals;
 - digitally decompressing the plurality of video signals;
 - selecting ~~at least one~~ a first of the plurality of video signals;
 - displaying the first selected video signal on a display device;
 - selecting a second of the plurality of video signals in response to a user selection; and
 - displaying the second selected video signal on the display device.